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STRANDING OF *LOPHOTUS LACEPEDEI* (GIORNA, 1809) AND A YOUNG SPECIMEN OF *TRACHYPTERUS TRACHYPTERUS* (GMELIN, 1789) AT ISCHIA ISLAND (GULF OF NAPLES, WESTERN MEDITERRANEAN)

LOPHOTUS LACEPEDEI (GIORNA, 1809) - *Lophotus lacepedei* is a mesopelagic fish living from the surface to about 1000 m depth (BINI, 1970; FISCHER et al., 1987). Its peculiarity is an ink sac used for protection from predators (BINI, 1970; TORTONESE, 1970). Outside the Mediterranean basin, the species is reported from the Atlantic Ocean off Canaries Islands, Florida, Rio de Janeiro, Madeira and South Africa (BINI, 1970). Although in the Mediterranean Sea *L. lacepedei* has been recorded in the Ligurian, Tyrrhenian and Adriatic Seas, Sicily and Spain (RANZI, 1954; BINI, 1970; TORTONESE, 1970; GIUFFRÉ et al., 1980; RAGONESE et al., 1997), complete sets of morphological data are often lacking.

On 6th January 1999, one large specimen of *L. lacepedei* was collected by local fishermen off the harbour of Ischia Porto, located along the north-eastern coast of the Island of Ischia (Gulf of Naples, Tyrrhenian Sea; 40° 45' N, 13° 57' E). Once in the laboratory, the specimen was measured according to RAGONESE et al. (1997) and the stomach was removed to analyse the content.

The body was silvery coloured without spots; fins were reddish. The main morphometric and meristic characters are reported in Table I. Both meristic and morphological features agree with literature information (see Table I).

The stomach content of the specimen from Ischia was composed by 4 well preserved Cephalopods, which were identified according to BELLO (1995) as *Sepietta oweniana* Orbigny (2 individuals), *Rondeletiola minor* Naef (1 indiv.) and *Loligo vulgaris* Lamarck (1 indiv.). In addition, a high number of beaks and crystallines was found. These data improve the previous

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literature information provided by BINI (1970) and FISCHER et al. (1987), who reported that the species feeds on pelagic fish, molluscs (mainly squids) and bathypelagic crustaceans.

Character	A	B	C	D	E
Total length (mm)	1030	1470	Max 1450	Max 1800	Max 1800
Standard length (mm)	992	1434	-	-	-
Head length (mm)	141	224	-	-	-
Preorbital length (mm)	31.3	45.4	-	-	-
Postorbital length (mm)	58.0	87.7	-	-	-
Eye diameter (mm)	32.5	54.4	-	-	-
Preal length (mm)	935	1343	-	-	-
Maximum height (mm)	159.6	248	-	-	-
Height at the operculum (mm)	145.3	245.5	-	-	-
Ink sac length (mm)	598	900	-	-	-
Dorsal fin rays number	234	248	207-258	220-260	220-260
Pectoral fin rays number	16	16	11-16	13-15	13-15
Anal fin rays number	18	20	12-20	18-19	18-20
Caudal fin rays number	18	18	17	-	-
Dorsal fin length (mm)	985	-	-	-	-
Pectoral fin length (mm)	14.4	21.8	-	-	-
Anal fin length (mm)	17.4	28.2	-	-	-
Number of vertebrae	133	140	-	-	-
Wet weight (g)	2480	9800	-	-	-

Tab. I - Morphological and meristic characters of the specimens of *Lophotus lacepedei* collected at Ischia compared with literature data (A: our specimen; B: RAGONESE et al., 1997; C: BINI, 1970; D: TORTONESE, 1970; E: FISCHER et al., 1987).

TRACHYPTERUS TRACHYPTERUS (GMELIN, 1789) - *Trachypterus trachypterus* is a mesopelagic fish living from the surface to about 900 m depth (BINI, 1970). It is distributed in the Central Pacific Ocean, Japan and New Zealand (BINI, 1970; TORTONESE, 1970). As far as the Mediterranean Sea is concerned, the species is reported from several areas, but the bulk of records came from the Adriatic Sea (TORTONESE, 1970; JARDAS, 1980; FISCHER et al., 1987; DULCIC, 1996). Moreover, despite the lacking of information on morphometry of juveniles stages, records of larvae and young specimens are reported by COSTA (1862), LO BIANCO (1908 a, b), SPARTÀ (1933), TORTONESE (1970) and DULCIC (1996). Reproduction and development were studied by several authors (SARDOU, 1966; TORTONESE, 1970, and references therein): the reproductive process takes place all around the year; eggs are spherical, transparent and of about 2.9-3.5 mm in diameter. After about 25 days of embryonic development, the larva is about 1 cm long at the hatching and bears threadlike ventral and dorsal fins. Striking changes take place during the development to the adult stage and such a marked allometric growth

determined a number of synonyms, in some cases inducing taxonomic confusion (SPARTÀ, 1933; PALMER, 1961; TORTONESE, 1970).

On 13th March 1998, a young specimen of *T. trachypterus* was found stranded alive on the Forio beach (40° 44' N, 13° 52' E), located on the western coast of the Island of Ischia.

The specimen was silvery coloured with reddish fins. Three dark spots were present on the dorsal portion and one dark spot on the ventral portion of the body. The main morphometric and meristic characters are reported in Table II. Most of them agree with literature information, even if a more complete comparison was not possible in reason of data lacking. Moreover, due to the well known allometric growth of the species (TORTONESE, 1970), it is difficult to compare specimens of different sizes (see Table II), since in literature the bulk of morphometric data concern adult specimens.

The stomach content was composed by crustacean Copepods (7 *Eucalanus* sp., 2 Eucheatidae), Mysids (10 *Gnatophausia zoea* Willemoës-Suhm, 1 indetermined larva), Amphipods (11 Hyperiididae, 3 Phrosinidae, 1 Phronimidae), Euphausiids (2 *Euphausia* sp., 1 *Meganictyphanes norvegica* (M. Sars), 16 Euphausiacea undetermined) and juveniles of Decapods (4 megalops of Brachyurans, 1 larva of Caridea). Our data are consistent to the observations provided by BINI (1970), who reported *T. trachypterus* as feeding on cephalopods, crustaceans and, pelagic and bathypelagic fish. By contrast, JARDAS (1980) found rests of polychaetes, seagrasses, algae, and other heterogeneous materials by analysing 3 stomachs of *T. trachypterus* from 32.5 to 54.8 cm in length.

Character	A	B	C	D
Total length (mm)	224	81-1700	Max 3000	137-1230
Preorbital length (mm)	4.4	-	-	-
Eye diameter (mm)	8.6	-	-	-
Trunk length (mm)	127	-	-	-
Head length (mm)	28.9	-	-	-
Head height (mm)	31.6	-	-	-
Preanal length (mm)	102	-	-	-
Dorsal fin rays number	5 + 170	145-185	5-7 + 120-180	126-181
Pectoral fin rays number	7	9-11	11	9-12
Pelvical fin rays number	1 + 7	5	1 + 7	5-7
Caudal fin rays number	8 + 5	8 + 5	6-8 + 3-6	7-8
Dorsal fin length (mm)	138	-	-	-
Pectoral fin length (mm)	5.1	-	-	-
Caudal fin length (mm)	48	-	-	-

Tab. II - Morphological and meristic characters of the young specimen of *Trachypterus trachypterus* collected at Ischia compared with the literature data (A: our specimen; B: PALMER, 1961; C: BINI, 1970; D: JARDAS, 1980).

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ABSTRACT

A large specimen of *Lophotus lacepedei* and a young individual of *Trachipterus trachipterus* were recorded at the Island of Ischia (Gulf of Naples, Italy, Tyrrhenian Sea). Morphological characters of the two specimens have been compared to the literature information. The analysis of stomach contents has also been conducted.

RÉSUMÉ

Dans cette note sont signalées les récoltes d'un grand exemplaire de *Lophotus lacepedei* et d'un jeune individu de *Trachypterus trachypterus* près de l'île de Ischia (Golfe de Naples, Italie, Mer Tyrrhénienne). Les caractéristiques morphologiques des deux exemplaires ont été comparées avec les informations disponibles en littérature et l'analyse des contenus stomacaux a été effectuée.

RIASSUNTO

In questa nota sono segnalati i ritrovamenti di un esemplare di grosse dimensioni di *Lophotus lacepedei* e di un giovane individuo di *Trachypterus trachypterus* presso l'Isola di Ischia (Golfo di Napoli, Mar Tirreno). Le caratteristiche morfologiche dei due esemplari sono state confrontate con le informazioni disponibili in letteratura. È stata inoltre eseguita l'analisi dei contenuti stomacali.